



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ENVIRONMENTAL CLEANUP

November 28, 2011

Mr. Bob Wyatt
NW Natural
220 NW 2nd Avenue
Portland OR 97209

Sent via email only

Mr. Tom McCue
Siltronic Corporation
7200 NW Front Avenue, M/S 20
Portland, Oregon 97210-3676

RE: Comments on Engineering Evaluation/Cost Analysis Technical Briefing – Gasco Sediments Site Presented October 19, 2011; Gasco Portland Site, Portland, Oregon, Administrative Settlement Agreement and Order on Consent for Removal Action USEPA Region 10, Docket No. CERCLA 10-2009-0255 Gasco Sediments Site within the Portland Harbor Superfund Site

Dear Sirs:

This letter presents EPA comments on the Engineering Evaluation/Cost Analysis Technical Briefing – Gasco Sediment Site presentation given October 19, 2011 by Anchor QEA, LLC for NW Natural and Siltronic Corporation. The briefing included a PowerPoint presentation consisting of 8 text slides and 14 figures. EPA understands that the intent of the presentation was to provide an overview of the technical approach being used by NW Natural and Siltronic Corporation for the Gasco Sediments Site to develop Engineering Evaluation/Cost Analysis (EE/CA) alternatives. The developed alternatives will be used to evaluate potential remedial actions to be considered as part of a non-time critical removal action at the Gasco Sediments Site.

The purpose of the technical briefing was to fulfill the requirements of the Statement of Work (SOW) for the Administrative Settlement Agreement and Order on Consent for Removal Action (AOC).¹ The presentation outlined an approach for performing an EE/CA at the Gasco Sediments Site that is consistent with the overall Portland Harbor Superfund site process. The goal of the Gasco Sediments Site project, as stated in the SOW, "...is the further characterization, studies, analysis, and design for a final remedy at the Site to facilitate construction of the remedial action to begin expeditiously following issuance of a Record of Decision (ROD) for the Portland Harbor Superfund Site." Further, "This action will include preference for removal of in-river materials containing "substantial product" (as defined in 3.6.2.1 of this SOW) such as Non Aqueous Phase Liquid (NAPL) and tar. It is anticipated that remedial action will be implemented under a consent decree following EPA issuance of the ROD."

EPA has prepared general and specific comments related to the October 19th presentation which are presented below. EPA expects NW Natural and Siltronic Corporation to incorporate these comments into the Draft EE/CA.

¹ Statement of Work to the ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION GASCO Sediments Site within Portland Harbor Superfund Site, Portland, Multnomah County, Oregon U.S. EPA Region 10 CERCLA Docket No. 10-2009-0255, dated 9/9/2009., p. 22.

General Comments

- 1) NW Natural and Siltronic Corporation must consider removal for all alternatives. Any non-removal scenario must consider the costs of restrictions on the considered structures, potential financial assurance requirements, costs associated with demolition of the structure and remediation of sediments at the end of the structures' life, and all costs associated with operation, maintenance and monitoring of alternative remedial measures that achieve equivalent protectiveness to human health and the environment as removal, through the assumed life of the structures. The slide titled *SubSMA Development and Preliminary Technology Screening* (page 21 of 22) indicates that under structure areas will not be considered for removal. There must be a removal scenario (with or without containment) included in the EE/CA that adequately addresses risk.
- 2) The areas delineated with substantial product do not include data points designated as containing substantial product (samples ending in 18SB, 20SB and 23SB) off the U.S. Moorings property (Figure 8 – *Summary of Presence of Substantial Product*). Further, this area is not bounded by samples with no substantial product. The boundary line at this location appears to coincide with the downstream property boundary of the Gasco site and is not a reflection of the probable extent of contamination from the Gasco site. The area containing these samples and bounded by a reasonable estimate of the downstream extent of contamination from the Gasco site must be considered as part of the Draft EE/CA, either separately or as a part of the areas presented in the technical briefing.
- 3) The Draft EE/CA must screen the data according to all of the current and relevant lines of evidence (LOE) from the harbor-wide human health and ecological risk assessments. The Draft EE/CA must specify all contaminants of concern and LOEs considered and utilize all available data as the basis for the screening. The screening must further identify areas that meet principal threat and/or hot spot² criteria in accordance with federal guidelines and state regulations. This includes using a mean quotient (MQ) of 0.7, not 0.85, in delineating the extent of benthic impacts.
- 4) The Draft EE/CA must describe the 2005 tar body removal and capping project, describe the areas addressed and those not addressed by the work and describe the nature of ongoing impacts from the non-remediated portions of the tar body. Areas of remaining tar, below and downriver of the FAMM dock, should be clearly delineated on site figures.
- 5) The depth of impact presented in Figure 11 – *PH RAL Depth of Impact Exceedances* and Figure 12 – *Comparison of PH RAL and Substantial Product Depth of Impact Exceedances* seems to indicate that contamination may extend off shore beyond the "Expanded EE/CA Remedial Footprint" (blue line). Although the depth of impact (DOI) is 0' along the offshore boundary in the upstream half of the Expanded EE/CA Remedial Footprint, the DOI is 6 – 12' along the offshore boundary in the downstream end of the Expanded EE/CA Remedial Footprint. Reasonable estimates of the furthest extent of contamination emanating from the Gasco site must

² Oregon Administrative Rules 340-122-0115(32)
http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_122.html accessed 11/14/2011.

be considered as part of the Draft EE/CA. The evaluation should consider whether actions are necessary to address subsurface contamination along the offshore margin to ensure protectiveness of human health and the environment. These areas can be considered separately or by expanding the areas presented in the technical briefing.

- 6) In general, the boundary lines presented in the figures are based on an interpretation of the data that does not adequately take into account uncertainties associated with contaminant distribution and heterogeneity of the sediments. Further, the use of computer algorithms to generate Theissen polygons must be balanced with professional judgment to develop appropriately conservative remediation prisms for development and analysis of remedial alternatives. NW Natural and Siltronic Corporation should use and document best professional judgment in developing the remediation areas and prisms used as the basis for analysis of remedial alternatives. These areas and prisms should consider appropriate limitations of available remedial/removal technologies and state all assumptions used in constructing their geometries.
- 7) The area just offshore of the 2005 Gasco removal and capping area shows up as a shoreward indentation in the boundary lines on several figures. This seems to be caused by the lack of data points in that area rather than clear information that the area is uncontaminated. NW Natural and Siltronic Corporation are asked to carefully consider the basis of this delineation as part of the Draft EE/CA.
- 8) The Draft EE/CA must fully integrate the riverbank, within the specified project limits, into the remedial considerations. The riverbank must be fully incorporated into the data compilation, screening, principal threat/hot spot evaluation, and evaluation of remedial technologies and alternatives.
- 9) The Draft EE/CA must fully consider the function and impact of the upland hydraulic control and containment (HC&C) system on the sediment remediation project. The Draft EE/CA will be considered incomplete unless the HC&C system is fully incorporated into the document.

Specific Comments

- 1) Figure 10 – *Summary of LOEs Used for EE/CA Alternatives Development – Reduced Remedial Footprint*: it is unclear why the benthic risk area does not include location DGS-01 (off shore of the Gasco/U.S. Moorings boundary) and surrounding areas. This area needs to be considered as noted in General Comment 2.
- 2) NW Natural and Siltronic Corporation may need to adjust the boundaries of the remediation based on adjustments to the benthic risk model mean quotients currently being considered as part of the Portland Harbor RI/FS process. NW Natural and Siltronic Corporation shall document the date of the mean quotient calculations in the Draft EE/CA.
- 3) Figure 11 – *PH RAL Depth of Impact Exceedances*: the use of a transition zone water hazard quotient greater than 100 (TZW HQ>100) is problematic without consensus of the agencies and trustees. NW Natural and Siltronic Corporation are encouraged to develop an alternative methodology and criteria that: 1) addresses potential risks associated with this pathway to human health and the environment; and 2) does not rely on a comparison to a HQ of 100.

As agreed to by EPA in e-mail correspondence with NW Natural on October 4, 2011, the inception date for the Draft EE/CA is NW Natural and Siltronic Corporation's receipt of these comments on the technical briefing and follow up agreement on resolution of the comments. Upon receipt and review of EPA comments, EPA expects NW Natural and Siltronic Corporation to propose a Draft EE/CA document development schedule and response to comments within 30 days. After EPA and NW Natural and Siltronic Corporation agree upon a schedule for delivery of the Draft EE/CA, EPA will provide a letter confirming a specific schedule modification to the SOW.

Please let me know if you have any questions or concerns at (206) 553-1220 or via email at Sheldrake.sean@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'SS', with a long horizontal line extending to the right.

Sean Sheldrake, RPM

Cc:

Kristine Koch, EPA
Chip Humphrey, EPA
Dana Bayuk, ODEQ
Lance Peterson, CDM

via email only